

What is Claimed is:

1. A container configured for storing an optical disk, said container having a display portion for displaying contents recorded on the optical disk,

wherein said display portion comprises a display device on which visible information can be repeatedly recorded and erased, and

wherein said display device is responsive to application of an electric field and to application of heat such that said display device changes its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in another direction.

2. A container configured for storing an optical disk as claimed in claim 1,

wherein said display device is formed with a polymer-dispersed liquid crystal film that can change orientations of liquid crystal molecules, dispersed in and held by high polymer material through action of heat and an electric field.

3. A method of using a container configured for storing an optical disk,

said container having a display portion for displaying contents recorded on the optical disk, said display portion being rewritable by being formed with a display device upon which visible information can be repeatedly recorded and erased,

wherein said display device is responsive to application of an electric field and to application of heat such that said display device changes its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in another direction, said method comprising:

causing said display device to enter a recorded state or an erased state through action of an electric field in one direction and through action of heat in the other direction; and

causing said display device to change its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in the other direction.

4. A method of using a container configured for storing an optical disk as claimed in claim 3,

wherein said display device is formed with a polymer-dispersed liquid crystal film that can change orientations of liquid crystal molecules dispersed in and held by high polymer material through action of heat and an electric field.

5. An optical disk, comprising:
an outer casing; and
a rewritable display portion mounted on said outer casing, said rewritable display portion having a display device, wherein visible information can be repeatedly recorded and erased on said display device;
wherein said display device is responsive to application of an electric field and to application of heat such that said display device changes its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in another direction.

6. A container configured for storing an IC memory card, said container having a display portion for displaying contents recorded on the IC memory card,
wherein said display portion comprises a display device on which visible information can be repeatedly recorded and erased,
wherein said display device is responsive to application of an electric field and to application of heat such that said display device changes its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in another direction.

7. A container configured for storing an IC memory card as claimed in claim 6,
wherein said display device is formed with a polymer-dispersed liquid crystal film that can change orientations of liquid crystal molecules dispersed in and held by high polymer material through action of heat and an electric field.

8. A method of using a container configured for storing an IC memory card,
said container having a display portion for displaying contents recorded on the IC memory card, said display portion being rewritable by being formed with a display device upon which visible information can be repeatedly recorded and erased,
wherein said display device is responsive to application of an electric field and to application of heat such that said display device changes its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in another direction, said method comprising:
causing said display device to enter a recorded state or an erased state through action of an electric field in one direction and through action of heat in the other direction; and

causing said display device to change its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in the other direction.

9. A method of using a container configured for storing an IC memory card as claimed in claim 8, wherein said display device is formed with a polymer-dispersed liquid crystal film that can change orientations of liquid crystal molecules dispersed in and held by high polymer material through action of heat and an electric field.

10. An IC memory card, comprising:
an outer casing; and
a rewritable display portion mounted on said outer casing, said rewritable display portion having a display device, wherein visible information can be repeatedly recorded and erased on said display device;
wherein said display device is responsive to application of an electric field and to application of heat such that said display device changes its state between a recorded state and an erased state through action of an electric field in one direction and through action of heat in another direction.

11. A recording and erasing system for repeatedly recording and erasing visible information on a recording medium, the system comprising:
a recording medium having an outer casing;
a container for storing the recording medium;
a display portion formed with a display device and provided on the recording medium, the outer casing of the recording medium, or the container;
a data output device for outputting information data including images, text, numbers and/or symbols;
a processing circuit for outputting the information data fed from the data output device through image signal processing;
a writing portion for applying an electric field or heat to the display portion in accordance with the information data fed from the processing circuit so as to repeatedly record on the display portion as visible information; and
an erasing portion for erasing the visible information displayed on the display portion by applying heat if the writing portion applies an electric field, or applying an electric field if the writing portion applies heat.

12. A recording and erasing system as claimed in claim 11,
wherein the display portion comprises a display device formed with a polymer-dispersed liquid crystal film that can change orientations of liquid crystal molecules dispersed in and held by high polymer material through action of heat and an electric field.